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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,004

02/25/2005

Donald A. Sheldon

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RATNERPRESTIA  
P O BOX 980  
VALLEY FORGE, PA 19482-0980

EXAMINER

CHOI, PETER Y

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/526,004	<b>Applicant(s)</b> SHELDON ET AL.	
	<b>Examiner</b> Peter Y. Choi	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-46 is/are pending in the application.
- 4a) Of the above claim(s) 12-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11 and 44-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**NON-FINAL ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on March 10, 2008, has been entered.

***Status Identifiers***

2. Claim 5 recites that "substantially all of the filaments of said one stratum have disposed on said surface thereof" (the claim does not contain the underline). As recited in the Advisory Action of January 29, 2008, Applicants' amendments of January 11, 2008, including the portion of claim 5 underlined above, were not entered. Therefore, claim 5 was not amended to include the amendment "of said one stratum." However, it appears that Applicants intended to include the limitation "of said one stratum" for examination in the currently examined claims and the claim will be examined accordingly. Since the amendment is currently being considered and since the amendment was not previously presented for examination, the status identifier for the claim should recite "Currently Amended." Further submissions to the Office should reflect that the claim has been amended.

***Claim Rejections - 35 USC § 102/103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 8, 9, 11, 44, and 46 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Statutory Invention Registration Number H1565 to Brodof.

Regarding claims 1-3, 5, 9, and 11, Brodof teaches an absorbent core for use in an absorbent article, the core comprising a plurality of substantially continuous and coextensive filaments in the form of an expanded tow, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a liquid superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on the surface thereof the layer comprising the superabsorbent material, and at least one additional stratum

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comprises filaments substantially free of superabsorbent material (see entire document including column 1 line 6 to column 2 line 55, column 2 line 65 to column 4 line 38, column 4 line 58 to column 5 line 42, column 6 lines 19-27, column 6 line 63 to column 7 line 7, Examples 1-13).

It should be noted that the claims are interpreted as requiring either a layer of superabsorbent material on the surface of the filaments or a layer of superabsorbent material on a surface of the core, since the claim language does not appear to be limited to one interpretation.

Regarding claim 2, the filaments are selected from the group consisting of RAYON, cellulose acetate, polypropylene, polyethylene, polyethylene terephthalate, and sheath-core bi-component filaments, and combinations thereof (column 2 line 65 to column 4 line 38).

Regarding claim 3, at least some of the filaments comprise cellulose acetate (column 2 line 65 to column 4 line 38).

Regarding claim 5, substantially all of the filaments of the one stratum have disposed on the surface thereof the layer comprising the superabsorbent material (column 4 line 58 to column 5 line 42).

Regarding claims 8, 44 and 46, Brodof teaches an absorbent core for use in an absorbent article, the core comprising a plurality of substantially continuous and coextensive filaments in the form of an expanded tow, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a liquid superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on said surface thereof said layer comprising the superabsorbent material, and at least one additional stratum comprises filaments substantially free of superabsorbent material, wherein the liquid superabsorbent

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polymer is selected from the group consisting of one or more superabsorbent polymers at least partially dissolved in a liquid carrier, a solution in a liquid carrier of one or more superabsorbent precursors, and a combination of one or more superabsorbent polymers and superabsorbent precursors(see entire document including column 1 line 6 to column 2 line 55, column 2 line 65 to column 4 line 38, column 4 line 58 to column 5 line 42, column 6 lines 19-27, column 6 line 63 to column 7 line 7, Examples 1-13).

It should be noted that the claims are interpreted as requiring either a layer of superabsorbent material on the surface of the filaments or a layer of superabsorbent material on a surface of the core, since the claim language does not appear to be limited to one interpretation.

Regarding claim 9, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (column 2 line 65 to column 4 line 38, column 4 line 58 to column 5 line 42, column 6 lines 19-27, column 6 line 63 to column 7 line 7, Examples 1-13).

Regarding claim 11, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (column 4 line 58 to column 5 line 42).

Regarding claim 44, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (column 2 line 65 to column 4 line 38, column 4 line 58 to column 5 line 42, column 6 lines 19-27, column 6 line 63 to column 7 line 7, Examples 1-13).

Regarding claim 46, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (column 4 line 58 to column 5 line 42).

In the event it is shown that Brodof does not disclose the claimed invention with sufficient specificity, the invention is obvious because Brodof discloses the claimed constituents and discloses that they may be used in combination.

5. Claims 1-5, 7-11, and 44-46 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Pub. No. 2003/0135176 to Delzer.

Regarding claims 1-5, 7, and 9-11, Delzer teaches an absorbent core for use in an absorbent article, the core comprising a plurality of substantially continuous and coextensive filaments in the form of an expanded tow, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a liquid superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on the surface thereof the layer comprising the superabsorbent material, and at least one additional stratum comprises filaments substantially free of superabsorbent material (see entire document including paragraphs 0001, 0009, 0017-0021, 0039-0047, 0064-0075, 0078-0084, 0090, 0114, 0133).

It should be noted that the claims are interpreted as requiring either a layer of superabsorbent material on the surface of the filaments or a layer of superabsorbent material on a surface of the core, since the claim language does not appear to be limited to one interpretation.

Regarding claim 2, the filaments are selected from the group consisting of RAYON, cellulose acetate, polypropylene, polyethylene, polyethylene terephthalate, and sheath-core bi-component filaments, and combinations thereof (paragraphs 0068-0071).

Regarding claim 3, at least some of the filaments comprise cellulose acetate (paragraphs 0068-0071).

Regarding claim 4, the surface of at least some of the filaments is hydrophilized (paragraphs 0068-0071).

Regarding claim 5, substantially all of the filaments of the one stratum have disposed on the surface thereof the layer comprising the superabsorbent material (paragraphs 0064, 0067).

Regarding claim 7, the at least one additional stratum comprises a surfactant disposed on the surface of at least some of the filaments (paragraphs 0068, 0069, 0080-0083).

Regarding claims 8 and 44-46, Delzer teaches an absorbent core for use in an absorbent article, the core comprising a plurality of substantially continuous and coextensive filaments in the form of an expanded tow, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on said surface thereof said layer comprising the superabsorbent material, and at least one additional stratum comprises filaments substantially free of superabsorbent material (see entire document including paragraphs 0001, 0009, 0017-0021, 0039-0047, 0064-0075, 0078-0084, 0090, 0114, 0133).

Regarding claims 8 and 44-46, Delzer does not appear to specifically teach that the superabsorbent material is formed in place on the surface from a liquid superabsorbent polymer, the liquid superabsorbent polymer selected from the group consisting of one or more superabsorbent polymers at least partially dissolved in a liquid carrier, a solution in a liquid carrier of one or more superabsorbent precursors, and a combination of one or more



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superabsorbent polymers and superabsorbent precursors. However, the limitation appears to recite a product-by-process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. The burden has been shifted to Applicants to show unobvious difference between the claimed product and the prior art product. The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if Applicants intend to rely on Examples in the specification or in a submitted declaration to show unobviousness, Applicants should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

It should be noted that the claims are interpreted as requiring either a layer of superabsorbent material on the surface of the filaments or a layer of superabsorbent material on a surface of the core, since the claim language does not appear to be limited to one interpretation.

Regarding claim 9, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (paragraphs 0090, 0114, 0133).

Regarding claim 10, the core further comprises pulp fibers interspersed between at least some of the filaments (paragraphs 0046, 0068-0071, 0082).

Regarding claim 11, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (paragraphs 0064, 0067).

Regarding claim 44, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (paragraphs 0090, 0114, 0133).

Regarding claim 45, the core further comprises pulp fibers interspersed between at least some of the filaments (paragraphs 0046, 0068-0071, 0082).

Regarding claim 46, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (paragraphs 0064, 0067).

In the event it is shown that Delzer does not disclose the claimed invention with sufficient specificity, the invention is obvious because Delzer discloses the claimed constituents and discloses that they may be used in combination.

### ***Claim Rejections - 35 USC § 103***

6. Claims 1-5, 7-11 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/63923 to Gross in view of Delzer.

Regarding claims 1-5, 7, and 9-11, Gross teaches an absorbent core for use in an absorbent article, the core comprising a plurality of filaments, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a liquid superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on the surface thereof the layer comprising the superabsorbent material, and at least one additional stratum comprises filaments substantially free of superabsorbent material (see entire

document including page 1 lines 9-18, page 3 lines 5-24, page 4 line 2 to page 5 line 13, page 8 lines 11-17, page 9 line 22 to page 11 line 13).

Regarding claims 1-5, 7, and 9-11, Gross does not appear to teach that the core comprises a plurality of substantially continuous and coextensive filaments in the form of an expanded tow. Since Gross is silent with regards to the specific structure and composition of the absorbent structure, it would have been necessary and thus obvious to look to the prior art for conventional materials. Delzer provides this conventional teaching showing that it is known in the absorbent article art to form an absorbent article wherein the absorbent core comprises cellulose acetate filaments in the form of a tow (Delzer, paragraphs 0001, 0009, 0017-0021, 0039-0047, 0064-0075, 0078-0084, 0090, 0114, 0133). Delzer teaches the advantages of forming an absorbent core with cellulose acetate filaments in a tow since tows have low overall basis weight and are thin, which improves the comfort and appearance of the garment. Therefore, it would have been obvious to one of ordinary skill in the absorbent article art at the time the invention was made to form the absorbent article of Gross, wherein the fibrous absorbent structure comprises cellulose acetate filaments in a tow, as taught by Delzer, motivated by the expectation of forming a conventional absorbent article with a structure known in the art to predictably result in a low basis weight and thin absorbent core suitable for applications such as diapers and sanitary napkins.

Regarding claim 2, Gross in view of Delzer teaches that the filaments are selected from the group consisting of RAYON, cellulose acetate, polypropylene, polyethylene, polyethylene terephthalate, and sheath-core bi-component filaments, and combinations thereof (Delzer, paragraphs 0068-0071).

Regarding claim 3, Gross in view of Delzer teaches that at least some of the filaments comprise cellulose acetate (Delzer, paragraphs 0068-0071).

Regarding claim 4, Gross in view of Delzer teaches that the surface of at least some of the filaments is hydrophilized (Delzer, paragraphs 0068-0071).

Regarding claim 5, substantially all of the filaments of the one stratum have disposed on the surface thereof the layer comprising the superabsorbent material (Gross, page 1 lines 9-18, page 3 lines 5-24, page 4 line 2 to page 5 line 13, page 8 lines 11-17, page 9 line 22 to page 11 line 13).

Regarding claim 7, Gross in view of Delzer teaches that the at least one additional stratum comprises a surfactant disposed on the surface of at least some of the filaments (paragraphs 0068, 0069, 0080-0083).

Regarding claims 8 and 44-46, Gross teaches an absorbent core for use in an absorbent article, the core comprising a plurality of filaments, at least some of the filaments having disposed on a surface thereof a layer comprising a superabsorbent material formed in place on the surface from a superabsorbent polymer, wherein the core comprises two or more adjacent and coextensive strata, wherein one stratum comprises filaments having disposed on said surface thereof said layer comprising the superabsorbent material, at least one additional stratum comprises filaments substantially free of superabsorbent material, wherein the superabsorbent material is formed in place on the surface from a liquid superabsorbent polymer, the liquid superabsorbent polymer selected from the group consisting of one or more superabsorbent polymers at least partially dissolved in a liquid carrier, a solution in a liquid carrier of one or more superabsorbent precursors, and a combination of one or more superabsorbent polymers and

superabsorbent precursors (see entire document including page 1 lines 9-18, page 3 lines 5-24, page 4 line 2 to page 5 line 13, page 8 lines 11-17, page 9 line 22 to page 11 line 13).

Regarding claims 8 and 44-46, Gross does not appear to teach that the core comprises a plurality of substantially continuous and coextensive filaments in the form of an expanded tow. Since Gross is silent with regards to the specific structure and composition of the absorbent structure, it would have been necessary and thus obvious to look to the prior art for conventional materials. Delzer provides this conventional teaching showing that it is known in the absorbent article art to form an absorbent article wherein the absorbent core comprises cellulose acetate filaments in the form of a tow (Delzer, paragraphs 0001, 0009, 0017-0021, 0039-0047, 0064-0075, 0078-0084, 0090, 0114, 0133). Delzer teaches the advantages of forming an absorbent core with cellulose acetate filaments in a tow since tows have low overall basis weight and are thin, which improves the comfort and appearance of the garment. Therefore, it would have been obvious to one of ordinary skill in the absorbent article art at the time the invention was made to form the absorbent article of Gross, wherein the fibrous absorbent structure comprises cellulose acetate filaments in a tow, as taught by Delzer, motivated by the expectation of forming a conventional absorbent article with a structure known in the art to predictably result in a low basis weight and thin absorbent core suitable for applications such as diapers and sanitary napkins.

Regarding claim 9, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (Gross, page 4 line 2 to page 5 line 13; Delzer, paragraphs 0090, 0114, 0133).

Regarding claim 10, Gross in view of Delzer teaches that the core further comprises pulp fibers interspersed between at least some of the filaments (Delzer, paragraphs 0046, 0068-0071, 0082). Delzer teaches the addition of cellulose pulp fibers to the tow materials since such combinations may be useful to maintain the improved SAP efficiency from the fibrous structure while providing additional benefits.

Regarding claim 11, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (Gross, page 4 line 2 to page 5 line 13).

Regarding claim 44, the core has two opposing sides and the superabsorbent material is disposed in a pattern on one or both of the opposing sides (Gross, page 4 line 2 to page 5 line 13; Delzer, paragraphs 0090, 0114, 0133).

Regarding claim 45, Gross in view of Delzer teaches that the core further comprises pulp fibers interspersed between at least some of the filaments (Delzer, paragraphs 0046, 0068-0071, 0082). Delzer teaches the addition of cellulose pulp fibers to the tow materials since such combinations may be useful to maintain the improved SAP efficiency from the fibrous structure while providing additional benefits.

Regarding claim 46, the core further comprises superabsorbent polymer particles interspersed among at least some of the filaments (Gross, page 4 line 2 to page 5 line 13).

### ***Response to Arguments***

7. Applicants' arguments with respect to claims 1-5, 7-11 and 44-46 have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571)272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/  
Primary Examiner, Art Unit 1794

/Peter Y Choi/  
Examiner, Art Unit 1794